

PERMIT NO. MI0058102



**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq; the "Federal Act"), Michigan Act 451, Public Acts of 1994, as amended (the "Michigan Act"), Parts 31 and 41, and Michigan Executive Orders 1991-31, 1995-4, and 1995-18,

**New Flevo Dairy, Incorporated**  
9717 Forrister Road  
Adrian, Michigan 49221

is authorized to discharge from the **New Flevo Dairy, Incorporated** facility located at

9717 Forrister Road  
Adrian, Michigan 49221

designated as **New Flevo Dairy-CAFO**

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in this permit.

This permit is based on a complete application submitted on April 11, 2006.

**This permit for a new use takes immediate effect on the date of issuance.** The provisions of this permit are severable. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term in accordance with applicable laws and rules.

This permit and the authorization to discharge shall expire at midnight, **October 1, 2014**. In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit an application which contains such information, forms, and fees as are required by the Department by **April 4, 2014**.

**Issued January 15, 2010.**

Original Permit Signed by Daniel Dell  
Daniel Dell, Chief  
Permits Section  
Water Bureau

## **PERMIT FEE REQUIREMENTS**

In accordance with Section 324.3120 of the Michigan Act, the permittee shall make payment of an annual permit fee to the Department for each October 1 the permit is in effect regardless of occurrence of discharge. The permittee shall submit the fee in response to the Department's annual notice. The fee shall be postmarked by January 15 for notices mailed by December 1. The fee is due no later than 45 days after receiving the notice for notices mailed after December 1. Fees paid in accordance with the Michigan Act are not refundable.

## **CONTACT INFORMATION**

Unless specified otherwise, all contact with the Michigan Department of Environmental Quality (the "Department") required by this permit shall be made to the Jackson District Supervisor of the Water Bureau. The Jackson District Office is located at 301 East Louis Glick Highway, Jackson, Michigan 49201-1556, Telephone: 517-780-7690, Fax: 517-780-7855.

## **CONTESTED CASE INFORMATION**

Any person who is aggrieved by this permit may file a sworn petition with the State Office of Administrative Hearings and Rules of the Michigan Department of Energy, Labor, and Economic Growth, setting forth the conditions of the permit which are being challenged and specifying the grounds for the challenge. The Department of Energy, Labor, and Economic Growth may reject any petition filed more than 60 days after issuance as being untimely.

## PART I

**Section A. Effluent Limitations and Monitoring Requirements****1. Authorized Discharges and Overflows**

During the period beginning on the effective date of this permit, and lasting until the expiration of this permit, the permittee is authorized to discharge the following, provided that the discharge does not cause or contribute to a violation of Michigan's Water Quality Standards:

- a. Large CAFO waste in the overflow from the storage structures identified in Part I.A.4.a. below, when all of the following conditions are met:
  - 1) These structures are properly designed, constructed, operated and maintained.
  - 2) Either chronic or catastrophic precipitation events cause an overflow of the storage structures to occur.
  - 3) The production area is operated in accordance with the requirements of this permit.
- b. Runoff from precipitation events from land application areas and areas listed in Part I.A.4.b.8) that are managed in accordance with the Nutrient Management Plan (NMP)(see Part I.A.4., below).

This permit does not authorize any discharge to the groundwaters. Such discharge may be authorized by a groundwater discharge permit issued pursuant to the Michigan Act.

**2. Monitoring Discharges and Overflows from Storage Structures**

The discharge authorized in Part I.A.1.a., above, shall be monitored four times daily (every six hours) by the permittee as specified below on any day when there is a discharge:

Parameter	Units	Sample Type
Overflow Volume (at storage structure)	MGD	Report Total Daily Volume
Discharge to Surface Waters Volume	MGD	Report Total Daily Volume
Overflow Observation (at storage structure)	---	Report Visual Condition of the Overflow
Discharge to Surface Waters Observation	---	Report Unusual Characteristics (see below)

Any unusual characteristics of the discharge at the point of discharge to surface waters (i.e., unnatural turbidity, color, oil film, odor, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported concurrently with the discharge reporting required in Part II.B.2., and included in the discharge report required by Part I.B.1. Receiving waters for the New Flevo Dairy, Incorporated, production area are Hazen Creek and an unnamed tributary to Hazen Creek.

**3. Prohibited Discharges**

During the period beginning on the effective date of this permit, and lasting until the expiration of this permit, the permittee is prohibited from having any dry weather discharge or discharging any large CAFO waste and/or runoff that doesn't meet the requirements of Part I.A.1. An overflow that causes the washout or collapse of the storage structure dikes, sides or walls is not an authorized discharge. Discharges from land application that does not meet the requirements of Part I.A.1. or that violate Water Quality Standards are prohibited.

**4. Nutrient Management Plan (NMP)**

The permittee shall implement the following requirements.

- a. Large CAFO Waste Storage Structures
  - 1) Volume Design Requirements  
The permittee shall have large CAFO waste storage structures in place and operational that are designed, constructed, maintained and operated to contain the total combined volume of all of the following:
    - a) All large CAFO waste generated from the operation of the large CAFO in a six-month or greater time period (including normal precipitation and runoff in the production area during the same time period). This is the operational volume of the storage structure.
    - b) All production area waste from a 3.6 inch rainfall. This is an emergency volume to be kept available to contain large rainfall events.

**PART I****Section A. Effluent Limitations and Monitoring Requirements**

- c) An additional design capacity of 12 inches of freeboard for facilities that are subject to precipitation caused runoff. For facilities that are totally enclosed and not subject to precipitation caused runoff, including the large CAFO waste storage structures, the freeboard shall be 6 inches. This is the freeboard volume.

Records documenting the current design volume of any large CAFO waste storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity shall be kept with the permittee's CNMP for a minimum of five years.

2) **Physical Design & Construction Requirements**

a) **Depth Gauge**

Large CAFO waste storage structures shall include an easily visible, clearly marked depth gauge. Clear, major divisions shall be marked to delineate each of the three volumes specified above in Part I.A.4.a.1).

b) **Structural Design**

Records documenting the current structural design, including as built drawings and specifications, of any large CAFO waste storage structures, whether or not currently in use, shall be kept with the permittee's CNMP until such structure is permanently closed in accordance with Part I.B.2.

A) **New Storage Structures (constructed after the effective date of this permit)**

Except as otherwise required by this permit, large CAFO waste storage structures shall, at a minimum, be constructed in accordance with NRCS standards, set forth in Conservation Practice Standard No. 313, Waste Storage Facility, dated November, 2005.

B) **Existing Storage Structures (constructed prior to the effective date of this permit)**  
The permittee shall either:

- (1) Provide documentation through an evaluation by a professional engineer that each storage structure is constructed in accordance with NRCS standards, set forth in Conservation Practice Standard No. 313, Waste Storage Facility, dated November 2005,
- (2) For each storage structure, demonstrate environmental performance equivalent to NRCS standards, set forth in Conservation Practice Standard No. 313, Waste Storage Facility, dated November, 2005. The demonstration shall be accomplished through an evaluation by a professional engineer, or
- (3) If the permittee cannot provide the documentation or demonstration required by (1) or (2) above, the permittee shall provide storage structures that attain (1) above, by May 1, 2011.

3) **Inspection Requirements**

The permittee shall inspect the large CAFO waste storage structures a minimum of one time weekly year-round. A record of the inspections shall be maintained by the permittee and kept with the CNMP for a period of five years. These inspections shall include all of the following:

- a) The large CAFO waste dikes for cracking, inadequate vegetative cover, woody vegetative growth, evidence of overflow, leaks, seeps, erosion, slumping, animal burrowing or breakthrough, and condition of the storage structure liner.
- b) The depth of the large CAFO waste in the storage structure and the available operating volume as indicated by the depth gauge.
- c) The collection system, lift stations, mechanical and electrical systems, transfer stations, control structures and pump stations to assure that valves, gates and alarms are set correctly and all are properly functioning.

4) **Operation & Maintenance Requirements**

The permittee has previously completed an Operations & Maintenance Guide for the operation of all manure management systems, including all components of the treatment system in accordance with the April 26, 2006 Consent Judgment. The permittee shall revise the guide to create and implement a Storage Structure Operation & Maintenance Program that incorporates all of the following management practices. The permittee shall initiate steps to correct any condition that is not in accordance with the Storage Structure Operation & Maintenance Program. A copy of the program shall be kept with the CNMP.

**PART I****Section A. Effluent Limitations and Monitoring Requirements**

- a) In the event that a rainfall event causes the level of large CAFO waste in the storage structure to rise above the maximum operational volume level and enter the emergency volume level, the Department shall be notified. The level in the storage structure shall be reduced within the next five days, weather and field conditions permitting, unless a longer time period is authorized by the Department (the removed large CAFO waste shall be land applied in accordance with this permit or the Department shall be notified if another method of disposal is to be used) and the emergency volume shall be restored.
- b) At some point in time during the period of November 1 to December 15 of each year, there shall be a minimum available operational volume in the large CAFO waste storage structures equal to the volume of large CAFO waste generated from the operation of the large CAFO in a six-month or greater time period (including normal precipitation and runoff in the production area during the same time period). The date of this occurring shall be recorded with the CNMP.
- c) Vegetation shall be maintained at a height not more than 6 inches above the ground on large CAFO waste dikes and the vegetation shall have sufficient density to prevent erosion.
- d) Dike damage caused by erosion, slumping or animal burrowing shall be corrected immediately and steps taken to prevent occurrences in the future.
- e) The integrity of the large CAFO waste storage structure liner shall be protected. Liner damages shall be corrected immediately and steps taken to prevent future occurrences.
- f) Problems with the collection system, lift stations, mechanical and electrical systems, transfer stations, control structures and pump stations shall be corrected as soon as possible. Records of these inspections and records documenting any actions taken to correct deficiencies shall be kept with the CNMP for a minimum of five years. Deficiencies not corrected within 30 days must be accompanied by an explanation of the factors causing the delayed correction.

**b. Best Management Practices Requirements**

The following are designed to achieve the objective of preventing unauthorized discharges to waters of the State from production areas and from land application activities.

**1) Conservation Practices**

The permittee shall maintain specific conservation practices near production areas and land application areas that are sufficient to control the runoff of pollutants to surface waters of the State in quantities that may cause or contribute to a violation of water quality standards. These practices shall be consistent with NRCS Conservation Practices.

**2) Divert Clean Water**

The permittee shall design and implement structures and management practices to divert clean storm water and floodwaters to prevent contact with contaminated portions of the production areas. Clean storm water may include roof runoff, runoff from adjacent land, and runoff from feed or silage storage areas where such runoff has not contacted feed, silage or silage leachate.

**3) Prevent Direct Contact of Animals with Waters of the State**

There shall be no access of animals to surface waters of the State at the production area of the large CAFO. The permittee shall develop and implement appropriate controls to protect water quality by preventing access of animals to waters of the State.

**4) Animal Mortality**

The permittee shall handle and dispose of dead animals in a manner that prevents contamination of waters of the State. Mortalities must not be disposed of in any liquid large CAFO waste or storm water storage structure or treatment system. Records of mortality management and practices shall be kept with the permittee's CNMP for a minimum of five years.

**5) Chemical Disposal**

The permittee shall prevent introduction of hazardous or toxic chemicals (for purposes of disposal) into large CAFO waste storage structures. Examples of hazardous and toxic chemicals are pesticides and petroleum products/by-products.

**PART I****Section A. Effluent Limitations and Monitoring Requirements****6) Inspection, Proper Operation and Maintenance**

The permittee shall implement an inspection, operation and maintenance program that includes periodic visual inspection, proper operation, and maintenance of all large CAFO waste handling equipment including piping and transfer lines, and all runoff management devices (e.g., cleaning separators, barnyards, catch basins, screens,) to prevent unauthorized discharges to surface water and to groundwater. Specific inspection requirements include all of the following:

- a) Weekly visual inspections of all clean storm water and floodwater diversion devices.
- b) Daily visual inspections of water lines, including drinking water and cooling water lines, and aboveground piping and transfer lines.
- c) Any deficiencies found as a result of inspections shall be corrected as soon as possible.
- d) Records of these inspections and records documenting any actions taken to correct deficiencies shall be kept with the CNMP for a minimum of five years. Deficiencies not corrected within 30 days must be accompanied by an explanation of the factors causing the delayed correction.

**7) Land Application of Large CAFO Waste****a) Field-by-Field Assessment**

The permittee shall conduct a field-by-field assessment of all land application areas. Each field shall be assessed prior to use for land application of large CAFO waste. This assessment shall determine the form, source, amount, timing, rate and method of application of large CAFO waste and will demonstrate that land application of large CAFO waste is in accordance with field specific nutrient management practices that ensures appropriate agricultural utilization of the nutrients in the large CAFO waste and will not result in unauthorized discharges. The assessment shall identify field specific conditions including soil type, locations of tile outlets, tile risers and tile depth, and offsite conditions such as buffers and distance or conveyance to surface waters. The assessment shall also include plans for maintaining the existing tile system integrity as well as maintaining buffer strips or equivalent measures as required by this permit designed to prevent prohibited discharges. Any new fields shall be assessed prior to their use for land application activities and the Department shall be notified of the new fields at least 48 hours prior to their use. All assessments shall be kept in the Land Application Log. An assessment for a particular field can be deleted from the Land Application Log once that field is no longer used for land application.

**b) Field Inspections**

Prior to conducting land application of large CAFO waste to fields determined to be suitable under Part I.A.4.b.7)a) above, the permittee shall perform the following inspections at the indicated frequency to ensure that unauthorized discharges do not occur as a result of the land application of large CAFO waste. Records of inspections, monitoring and sampling required by this section shall be recorded in the Land Application Log required by Part I.A.4.b.7)g).

A) Large CAFO waste shall be sampled a minimum of once per year to determine nutrient content and analyzed for total Kjeldahl nitrogen (TKN), ammonium nitrogen, and total phosphorus. Large CAFO waste shall be sampled in a manner that produces a representative sample for analysis. Guidance for large CAFO waste sampling protocols can be found in Bulletin NCR 567 available from Michigan State University Extension. Analytical methods shall be as required by Part II.B.13. The results shall be used to determine land application rates. Record the nutrient levels, analysis methods used and basis for determining land application rates.

B) Soils at land application sites shall be sampled a minimum of once every three years to determine phosphorus levels and the results shall be used to determine land application rates. Sample soil using an 8 inch vertical core, and take 20 or more cores in a random pattern spread evenly over each uniform field area. A uniform field area shall be no greater than 20 acres or it can be up to 40 acres if that field has one soil map unit and has been managed as a single field for the last ten years. The 20 cores shall be composited into one sample and analyzed using the Bray P1 method. Alternate methods may be used upon approval of the Department. Record the phosphorus levels. Additional information on soil sampling can be found in Michigan State University Extension Bulletins E2904 and E498.

**PART I****Section A. Effluent Limitations and Monitoring Requirements**

C) The permittee shall inspect each field no earlier than 24 hours prior to each land application of large CAFO waste to that field to evaluate the current suitability of the site for application. This inspection shall include, at a minimum, the state of all tile outlets, evidence of soil cracking, the moisture holding capacity of the soil, crop maturity, and the condition of designated conservation practices (i.e., grassed waterways, buffers, diversions). Keep written records of the results and findings of all inspections.

D) The permittee shall visually inspect all tile outlets draining a given field immediately prior to the land application of large CAFO wastes to that field. Tile outlets shall be inspected again upon the completion of the land application to the field, or at the end of the working day should application continue on that field for more than one day (include written descriptions of tile inspections, and observe and compare color and odor before and after land application).

E) All tiled fields to which large CAFO wastes have been applied in the prior 30 days shall be visually inspected within 24 hours after the first rain event of one-half inch or greater, for signs of a discharge of large CAFO waste. Keep written descriptions of tile inspections. If an inspection reveals a discharge with color, odor, or other characteristics indicative of an unauthorized discharge of large CAFO waste, then permittee shall immediately notify the Department of the suspected unauthorized discharge in accordance with the reporting procedures contained in Part II.B.2.

F) The permittee shall inspect all land application equipment daily during use for leaks, structural integrity, and proper operation and maintenance. Land application equipment shall be calibrated annually to ensure proper application rates. Maintain written records of inspections and calibrations.

c) **Maximum Annual Land Application Rates**

The permittee shall comply with all of the following maximum annual land application rates:

A) If the Bray P1 soil test result is 150 parts per million (ppm) or more, CAFO waste applications shall be discontinued until nutrient use by crops reduces the Bray P1 soil test result to less than 150 ppm P.

B) If the Bray P1 soil test result is 75 ppm P or more but less than 150 ppm P, application rates shall be based on the maximum rates of phosphorus (P) in annual pounds per acre as calculated using the following formula:

The realistic yield goal per acre, using the units specified in the table below, for the planned crop multiplied by the number in the P column for that crop.

The result is the maximum annual pounds per acre of P that may be applied for the first crop planned after application of CAFO waste. If the one year rate is impractical due to spreading equipment or crop production management, the permittee may apply up to two years of P at one time but no P may be applied to that field for the second year. The two year P application rate shall be the results calculated using the formula above for each of the two crops planned for the next two years and those two annual results shall be added together to determine the maximum P application rate. In no case may the application rate exceed the nitrogen application rate as specified below.

C) If the Bray P1 soil test result is less than 75 ppm P, the annual rate of large CAFO waste application shall not exceed the nitrogen fertilizer recommendation (removal value for legumes) for the first crop year grown after the large CAFO waste is applied. In no case may the application rate exceed four years of P calculated using the formula in B) above for each of the four crops planned for the next four years and those four annual results shall be added together to determine the maximum application rate.

D) The maximum annual application rates as calculated above shall be achieved by using the CAFO waste test results for P or nitrogen to determine the amount of CAFO waste that may be land applied per acre per year.

## PART I

## Section A. Effluent Limitations and Monitoring Requirements

P<sub>2</sub>O<sub>5</sub> values are included for reference purposes.

Crop	Harvest Form	Unit of Realistic Yield Goal per Acre	P	P <sub>2</sub> O <sub>5</sub>
			-- lb/unit of yield --	
Alfalfa	Hay	ton	5.72	13.1
Alfalfa	Haylage	ton	1.41	3.2
Apple	Fruit	ton	0.19	0.44
Asparagus	Shoots	ton	1.1	2.51
Barley	Grain	bushel	0.17	0.38
Barley	Straw	ton	1.41	3.2
Beans (dry edible)	Grain	cwt	0.53	1.2
Beans (green, fresh)	Pods	ton	1.22	2.8
Blueberry	Fruit	ton	0.20	0.46
Bromegrass	Hay	ton	5.72	13
Buckwheat	Grain	bushel	0.11	0.25
Canola	Grain	bushel	0.40	0.91
Carrots	Root	ton	0.79	1.81
Cherries (sour)	Fruit	ton	0.3	0.69
Cherries (sweet)	Fruit	ton	0.37	0.85
Clover	Hay	ton	4.4	10
Clover-grass	Hay	ton	5.72	13
Corn	Grain	bushel	0.16	0.37
Corn	Stover	ton	3.61	8.2
Corn	Silage	ton	1.45	3.3
Cucumbers	Fruit	ton	0.47	1.1
Grapes	Fruit	ton	0.26	0.6
Millet	Grain	bushel	0.11	0.25
Oats	Grain	bushel	0.11	0.25
Oats	Straw	ton	1.23	2.8
Orchardgrass	Hay	ton	7.48	17
Peaches	Fruit	ton	0.24	0.55
Pears	Fruit	ton	0.23	0.53
Plums	Fruit	ton	0.2	0.46
Potato	Tubers	cwt	0.06	0.13
Rye	Grain	bushel	0.18	0.41
Rye	Straw	ton	1.63	3.7
Rye	Silage	ton	0.66	1.5
Sorghum	Grain	bushel	0.17	0.39
Sorghum-Sudangrass	Hay	ton	6.6	15
Sorghum-Sudangrass	Haylage	ton	2.02	4.6
Soybean	Grain	bushel	0.35	0.8
Spelts	Grain	bushel	0.17	0.38
Squash	Fruit	ton	0.76	1.74
Sugar beets	Roots	ton	0.57	1.3
Sunflower	Grain	bushel	0.53	1.2
Timothy	Hay	ton	7.48	17
Tomatoes	Fruit	ton	0.57	1.3
Trefoil	Hay	ton	5.28	12
Wheat	Grain	bushel	0.28	0.63
Wheat	Straw	ton	1.45	3.3

Methodology and calculations consistent with this Part, and their results, shall be recorded in the Land Application Log.

**PART I****Section A. Effluent Limitations and Monitoring Requirements****d) Prohibitions**

- A) Large CAFO waste shall not be applied on land that is flooded or saturated with water at the time of land application.
- B) Large CAFO waste shall not be applied during rainfall events.
- C) Large CAFO waste shall not be surface applied without incorporation to frozen or snow covered ground except in accordance with the Department 2005 Technical Standard for the Surface Application of Large CAFO Waste on Frozen or Snow-Covered Ground Without Incorporation or Injection (last page of this permit).
- D) Large CAFO waste shall not be land applied from January 1 to March 1 of each year.
- E) The permittee shall not transfer large CAFO waste to a recipient for land application to a field from which a discharge has occurred until the recipient has prepared and received approval from the Department of a corrective action plan for the field.
- F) Large CAFO waste application shall be delayed if rainfall exceeding one-half inch, or less if a lesser rainfall event is capable of producing an unauthorized discharge, is forecasted by the National Weather Service within 24 hours of the time of the planned application. Forecast models to be used can be found on the internet at <http://www.nws.noaa.gov/mdl/synop/products.shtml>. Model data to be used for one-half inch shall be:
  - i) GFS MOS (MAV) Forecast Graphics: If the 24H Prob.  $\geq 0.50$  in. is 70% or greater for the land application location then land application shall be delayed until the 24H Prob.  $\geq 0.50$  in. is less than 70%.
  - ii) GFS MOS (MEX) Text Message by Station Forecast: If the Q24 is 4 or greater then land application shall be delayed until the Q24 is less than 4. The stations to be used are Adrian and Hillsdale.

Different model data shall be used if it is determined that rainfall less than  $\frac{1}{2}$ " on a particular field is capable of causing an unauthorized discharge. For example: using the 24hr Prob.  $\geq .25$ " and a Q24 rating of 3 or greater may be appropriate on higher risk fields. If the NWS website is revised and the required forecast models are not available, the permittee shall contact the Department for information on which forecast models to use. Instructions for using this website are available from the Department. Other forecast services may be used upon approval of the Department.

**e) Methods**

Large CAFO waste shall be subsurface injected or incorporated into the soil within 24 hours of application. Large CAFO waste subsurface injected into frozen or snow covered ground shall have substantial soil coverage of the applied large CAFO waste. The following exceptions apply:

- A) Injection or incorporation may not be feasible where large CAFO wastes are applied to pastures or forage crops, such as alfalfa, wheat stubble or where no-till practices are used. Large CAFO waste may not be applied to pastures or forage crops, such as alfalfa, wheat stubble or where no-till practices are used where large CAFO waste may enter waters of the state.
- B) On ground that is frozen or snow-covered, large CAFO waste may be surface applied and not incorporated within 24 hours only if there is a field-by-field demonstration, in accordance with the Department 2005 Technical Standard for the Surface Application of Large CAFO Waste on Frozen or Snow-Covered Ground Without Incorporation or Injection (last page of this permit), showing that such land application will not result in a situation where large CAFO waste may enter waters of the state. Demonstrations shall be kept with the Land Application Log and submitted to the Department prior to use of the field.

**f) Setbacks**

The permittee shall comply with any of the following setback requirements:

- A) Large CAFO waste shall not be applied closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or grassed waterways, ditches and swales that are conduits to surface waters.

**PART I****Section A. Effluent Limitations and Monitoring Requirements**

B) The permittee may substitute the 100-foot setback required in A), above, with a 35-foot wide vegetated buffer. Large CAFO waste shall not be applied within the 35-foot buffer.

g) **Land Application Log**

The results of land application inspections, monitoring, testing and record keeping shall be recorded in a "Land Application Log" which shall be kept up-to-date and with the CNMP. Log records shall be kept for a minimum of five years. The permittee shall document in the log in writing, as a minimum, records required by Part I.A.4.b.7) and all of the following information and inspection results:

- A) The time, date, quantity, method, location and application rate for each location at which large CAFO wastes are land applied.
- B) Expected and actual crop yields for each field receiving large CAFO waste.
- C) Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than large CAFO waste.
- D) The total amount of nitrogen and phosphorus actually applied to each field including sources other than large CAFO waste, including documentation of calculations for the total amount applied.
- E) A written description of weather conditions at time of application and for 24 hours prior to and following application based on visual observation.
- F) Printouts of weather forecasts from the time of land application. Weather forecasts may also be saved as electronic files in which case the files do not need to be physically located in the log, but the log shall reference the location where the files are stored.

8) **Non-Production Area Storm Water Management**

The permittee shall implement practices including preventative maintenance, good housekeeping, and periodic inspections of at least once per year, to minimize and control pollutants in storm water discharges associated with the following areas:

- a) Immediate access roads and rail lines used or traveled by carriers of raw materials, waste material, or by-products used or created by the facility.
- b) Sites used for handling material other than large CAFO waste.
- c) Refuse sites.
- d) Sites used for the storage and maintenance of material handling equipment.
- e) Shipping and receiving areas.

9) **Record Keeping Forms**

The permittee shall use, where available, Department prepared forms for record keeping when conducting inspections as required by this part, Part I.A.4. The forms shall be used to document all inspections, any issues encountered and how issues were resolved. The permittee shall develop their own forms when none are available from the Department. Completed forms shall be made immediately available to the Department upon request.

**5. Comprehensive Nutrient Management Plan (CNMP)**

The CNMP shall apply to both production areas and land application areas and shall be a written document that describes the practices, methods and actions the permittee takes to meet all of the requirements of the Nutrient Management Plan, Part I.A.4.\*

a. **Approval**

The CNMP shall be approved by a Certified CNMP Provider.

## PART I

**Section A. Effluent Limitations and Monitoring Requirements****b. Submittal and Contents**

An up-to-date CNMP shall be submitted to the Department by July 1, 2010. The permittee is encouraged to submit all or parts of the CNMP in electronic form. Electronic form means a digital file in a standard, common format provided on a compact disc or other media readily readable by a Windows based personal computer. Updates shall be submitted as required by Part I.A.5.c. and I.A.5.d., below. The CNMP submitted to the Department shall include:

- 1) Large CAFO Waste Storage Structures - ensure adequate storage capacity of production area waste and CAFO process wastewater [Section A.4.a.]
  - a) Volume Design Requirements [Section A.4.a.1)]  
Records documenting current design volume of any large CAFO waste storage structures, including volume for solids accumulations, design treatment volume, total design volume, and approximate number of days of storage capacity.
  - b) Physical Design and Construction Requirements [Section A.4.a.2)]  
Records documenting the current structural design including as built drawings and specifications, of any large CAFO waste storage structures, whether or not currently in use.
  - c) Inspection Requirements [Section A.4.a.3)]  
Weekly inspection plan for waste storage structures.
  - d) Operation and maintenance [Section A.4.a.4)]  
Storage Structure Operation and Maintenance Plan.
- 2) Best Management Practices Requirements [Section A.4.b.]
  - a) Conservation Practices [Section A.4.b.1)]  
Identify specific conservation practices used to control the runoff of pollutants.
  - b) Divert Clean Water [Section A.4.b.2)]  
Identify structures and management practices used to divert clean water from the production area.
  - c) Prevent direct contact of confined animals with waters of the state in the production area [Section A.4.b.3)]  
Identify appropriate controls used to prevent animal access to waters of the state in the production area.
  - d) Animal Mortality [Section A.4.b.4)]  
Identify appropriate practices that ensure proper management of mortalities.
  - e) Chemical Disposal [Section A.4.b.5)]  
Identify appropriate practices that ensure chemicals and other contaminants handled at the CAFO are not disposed of in any production area, CAFO process wastewater, or storm water storage or treatment system.
  - f) Inspection, Proper Operation and Maintenance [Section A.4.b.6)]  
Provide an inspection, operation, and maintenance program for large CAFO wastewater and runoff handling equipment and management devices.
  - g) Land application of Large CAFO Waste [Section A.4.b.7)]  
Provide a land application plan that includes:
    - A) Field-by-field assessment of all land application areas.
    - B) Testing of production area waste and soils at land application sites.
    - C) Field Inspections prior to and following land application.
    - D) Inspections of land application equipment.
    - E) Field specific application rates for large CAFO wastes.
    - F) Appropriate prohibitions for land application.
    - G) Methods of application.
    - H) Setback requirements for each field.
  - h) Non-Production Area Storm Water Management [Section A.4.b.8)]  
Identify appropriate non-production area storm water management practices.

**c. Annual Review and Report**

The permittee shall annually review the CNMP and update the CNMP as necessary to meet the requirements of Part I.A.4. The permittee shall submit an annual report for the preceding January 1 through December 31 (calendar year) to the Department by April 1 of each year. The annual report shall be submitted on a form provided by the Department. The annual report shall include, but is not limited to, all of the following:

**PART I****Section A. Effluent Limitations and Monitoring Requirements**

- 1) The average number of animals, maximum number of animals at any one time, and the type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other).
- 2) Estimated amount of total large CAFO waste generated by the large CAFO in the previous 12 months (tons or gallons).
- 3) Estimated amount of total large CAFO waste transferred to other persons by the large CAFO in the previous 12 months (tons or gallons).
- 4) Total number of acres for land application covered by the CNMP developed in accordance with this permit.
- 5) Total number of acres under control of the large CAFO that were used for land application of large CAFO waste in the previous 12 months.
- 6) A field specific spreading plan which identifies where and how much large CAFO waste will be applied to fields for the upcoming 12 months. The plan must account for all large CAFO waste expected to be generated in the upcoming 12 months.
- 7) The Land Application Log.
- 8) A statement indicating whether the current version of the large CAFO's CNMP was developed or approved by a certified CNMP provider.
- 9) A summary of all production area waste and CAFO process wastewater discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume.
- 10) Updated portions of the CNMP not previously submitted to the Department.

**d. CNMP Revisions**

Prior to a significant change in the operation of the large CAFO, whenever there is an unauthorized discharge (see Parts I.A.1 and I.A.3.) that could have been prevented by a change in the CNMP, if the amount of large CAFO waste being generated exceeds the permittee's capacity to manifest, utilize or dispose of the large CAFO waste, or if the Department determines that the CNMP is inadequate in preventing pollution, the CNMP shall be revised and the revisions approved by a Certified CNMP Provider. Within ninety (90) days of a significant change, an unauthorized discharge or a Department requested revision; the revised portions of the CNMP shall be submitted to the Department with a copy of the Certified CNMP Provider certification that the revised CNMP has been approved. Significant change includes, but is not limited to, any of the following:

- 1) An increase in the number of animals that is greater than or equal to 10% of the number identified in the CNMP.
- 2) An increase in the number of animals that results in a decrease in the waste storage capacity time, as identified in the CNMP, by one month or greater.
- 3) An increase in the number of animals where the large CAFO waste generated by the livestock requires more land for its application than is available at the time of the increase.
- 4) A decrease in the number of acres available for land application, where the large CAFO waste generated requires more land for application than will be available after the decrease.

\* The Department recognizes that CNMPs are developed pursuant to programs other than the National Pollutant Discharge Elimination System (NPDES). The CNMP developed under this permit may follow the same format as the CNMP outline dated August 10, 2000 available at [www.maeap.org](http://www.maeap.org) or from the Department. If that CNMP outline is followed then the CNMP submitted to the Department may omit portions, such as animal inputs, not related to compliance with permit requirements.

**PART I****Section B. Other Requirements****1. Reporting of Overflows and Discharges from Large CAFO Waste Storage Structures and Land Application**

If, for any reason, there is an overflow from large CAFO waste storage structures and/or a discharge of pollutants to a surface water of the State from large CAFO waste storage structures, production areas, or land application areas, the permittee shall report the overflow and/or discharge to the Department in accordance with the reporting procedures contained in Part II.B.2. Discharges to surface waters shall also be reported to the Clerk of the local unit of government and the county health department. In addition, the permittee shall keep a copy of the report together with the approved CNMP. The report shall include all of the following information:

- a. A description of the overflow and/or discharge and its cause, including a description of the flow path to the surface water of the State.
- b. The period of overflow and/or discharge, including exact dates and times, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate and prevent recurrence of the overflow and/or discharge.
- c. Monitoring results as required by Part I.A.2.
- d. In the event of a discharge through tile lines, the permittee shall identify and document, for field(s) from which the discharge occurred, the location of tile and depth of tile. The permittee shall also document field conditions at the time of the discharge, determine why the discharge occurred and how to prevent future discharges.
- e. If the permittee believes that the discharge is an authorized discharge, then the permittee shall include a demonstration that the discharge meets the requirements of Part I.A.1.a. and/or Part I.A.1.b., as appropriate.

**2. Closure of Structures and Facilities**

The following conditions shall apply to the closure of lagoons, large CAFO waste storage structures, earthen or synthetic lined basins, other manure and wastewater facilities, and silage facilities (collectively referred to as "structure(s)" for the remainder of this Part):

No structure shall be permanently abandoned unless closed in compliance with this section. Structures shall be maintained at all times until closed in compliance with this section. All structures must be properly closed if the permittee ceases operation. In addition, any structure that is not in use for a period of twelve consecutive months must be properly closed unless the permittee intends to resume use of the structure at a later date, and either: (a) maintains the structure as though it were actively in use, to prevent compromise of structural integrity and assure compliance with final effluent limitations, or (b) removes large CAFO waste to a depth of one foot or less and refills the structure with clean water to preserve the integrity of the synthetic or earthen liner. In either case, the permittee shall conduct routine inspections, maintenance, and record-keeping as though the structure were in use. The permittee shall notify the Department in writing prior to closing structures, or upon making a determination that the structures will be maintained as specified in (a) or (b) above. Prior to restoration of use of the structure, the permittee shall notify the Department in writing and provide the opportunity for inspection.

The permittee shall accomplish closure by removing all waste materials to the maximum extent practicable. This shall include agitation and the addition of clean water as necessary to remove the waste materials. The permittee shall utilize as guidance the closure techniques contained in NRCS Conservation Practice Standard No. 360, Closure of Waste Impoundments. All removed materials shall be utilized or disposed of in accordance with the permittee's approved CNMP, unless otherwise authorized by the Department.

Unless the structure is being maintained for possible future use in accordance with the requirements above, completion of closure for structures shall occur as promptly as practicable after the permittee ceases to operate or, if the permittee has not ceased operations, 12 months from the date on which the use of the structure ceased, unless otherwise authorized by the Department.

**PART I****Section B. Other Requirements****3. Standards, Specifications and Practices**

The published standards, specifications and practices referenced in this permit are those which are in effect at the time of permit issuance, unless otherwise provided by law. NRCS Conservation Practice Standards referred to in this permit are currently contained in Section IV, Practice Standards and Specifications, of the Michigan NRCS Field Office Technical Guide.

**4. Facility Contact**

The "Facility Contact" was specified in the application. The permittee may replace the facility contact at any time, and shall notify the Department in writing within 10 days after replacement (including the name, address and telephone number of the new facility contact).

- a. The facility contact shall be any of the following (or a duly authorized representative of this person):
  - For a corporation or a company, a principal executive officer of at least the level of vice president, or a designated representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the permit application or other NPDES form originates.
  - For a partnership, a general partner.
  - For a sole proprietorship, the proprietor.
  - For a municipal, state, or other public facility, either a principal executive officer, the mayor, village president, city or village manager or other duly authorized employee.
- b. A person is a duly authorized representative only if both of the following requirements are met:
  - The authorization is made in writing to the Department by a person described in paragraph a. of this section.
  - The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the facility (a duly authorized representative may thus be either a named individual or any individual occupying a named position).

Nothing in this section obviates the permittee from properly submitting reports and forms as required by law.

**5. Duty to Maintain Permit Coverage**

No later than 180 days before the expiration of the permit, the permittee must submit an application to renew its permit. However, the permittee need not seek continued permit coverage or reapply for a permit if both of the following apply:

- a. The facility has ceased operation or is no longer a CAFO.
- b. The permittee has demonstrated to the satisfaction of the Department that there is no remaining potential for a discharge of large CAFO waste that was generated while the operation was a CAFO.

**6. Requirements for Land Application Not Under the Control of the large CAFO Permittee**

In cases where large CAFO waste is sold or given away to another person (recipient) such that the land application of that large CAFO waste is no longer under the operational control of the large CAFO owner or operator that generates the large CAFO waste (generator), a manifest shall be completed and used to track the transfer and use of the large CAFO waste.

- a. Prior to transfer of the large CAFO waste, the large CAFO owner or operator shall do all of the following:
  - 1) Prepare a manifest for tracking the large CAFO waste before transferring the large CAFO waste.
  - 2) Designate on the manifest the recipient of the large CAFO waste.
- b. The generator shall use a manifest form which is approved by the Department and which provides for the recording of all of the following information:
  - 1) A manifest document number.
  - 2) The generator's name, mailing address, and telephone number.
  - 3) The name and address of the recipient of the large CAFO waste.

**PART I****Section B. Other Requirements**

- 4) The nutrient content of the large CAFO waste to be transferred, in sufficient detail to determine the appropriate land application rates.
  - 5) The total quantity by units of weight or volume and the number and size of the loads or containers used to transfer that quantity of large CAFO waste.
  - 6) A statement that informs the recipient of his/her responsibility to properly manage the land application of the large CAFO waste as necessary to assure there is no illegal discharge of pollutants to waters of the State.
  - 7) The following certification by the generator: "I hereby declare that the large CAFO waste is accurately described above and is suitable for land application."
  - 8) Other certification statements as may be required by the Department.
  - 9) The address or other location description of the site or sites used by the recipient for land application or other disposal or use of the large CAFO waste.
  - 10) Signatures of the generator and recipient with dates of signature.
- c. The generator shall do all of the following with respect to the manifest:
- 1) Sign and date the manifest certification prior to transfer of the large CAFO waste.
  - 2) Obtain a dated signature of the recipient on the manifest and the date of acceptance of the large CAFO waste.
  - 3) Retain a copy of the signed manifest.
  - 4) Provide a signed copy to the recipient.
  - 5) Advise the recipient of his or her responsibilities to complete the manifest and, if not completed at time of delivery, return a copy to the generator within 30 days after completion of the land application or other disposal or use of the large CAFO waste.
- d. One manifest may be used for multiple loads or containers of the same large CAFO waste transferred to the same recipient. The manifest shall list separately each address or location used by the recipient for land application or other disposal or use of the large CAFO waste. Each different address or location listing shall include the quantities of large CAFO waste transferred to that location and dates of transfer.
- e. The generator shall not sell, give away or otherwise transfer large CAFO waste to a recipient if any of the following are true:
- 1) The recipient fails or refuses to provide accurate information on the manifest in a timely manner.
  - 2) The use or disposal information on the manifest indicates improper land application, use or disposal;
  - 3) The generator learns that there has been improper land application, use or disposal of the manifested large CAFO waste.
  - 4) The generator has been advised by the Department that the Department or a court of appropriate jurisdiction has determined that the recipient has improperly land applied, used, or disposed of a manifested large CAFO waste.
- f. If the generator has been prohibited from selling, giving or otherwise transferring large CAFO waste to a particular recipient under Part I.B.6.e., above, and the generator wishes to resume selling, giving or otherwise transferring large CAFO waste to that particular recipient, then the one of the following shall be accomplished:
- 1) For improper paperwork only, such as incomplete or inaccurate information on the manifest, the recipient must provide the correct, complete information.
  - 2) For improper land application, use or disposal of the large CAFO waste by the recipient, the generator must demonstrate, in writing, to the Department that the improper land application, use or disposal has been corrected, and the Department has provided approval of the demonstration.
- g. All manifests shall be kept on-site with the large CAFO owner or operator's CNMP for a minimum of five years and made available to the Department upon request.
- h. The requirements of Part I.B.6. do not apply to quantities of large CAFO waste less than one pickup truck load, one cubic yard, or one ton per recipient per day.

## PART II

### Section A. Definitions

**Animal feeding operation (AFO)** means a lot or facility that meets both of the following conditions:

1. Animals, other than aquatic animals, have been, are, or will be stabled or confined and fed or maintained for a total of 45 calendar days or more in any 12-month period.
2. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over the portion of the lot or facility where animals are confined.

Two or more AFOs under common ownership are considered to be a single AFO if they adjoin each other or if they use a common area or system for the disposal of wastes. Common area includes land application areas.

**CAFO process wastewater** means water directly or indirectly used in the operation of a large CAFO for any of the following:

1. Spillage or overflow from animal or poultry watering systems.
2. Washing, cleaning, or flushing, pens, barns, manure pits, or other AFO facilities.
3. Direct contact swimming, washing, or spray cooling of animals.
4. Dust control.
5. Any water which comes into contact with, or is a constituent of, any raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding.

**Catastrophic precipitation event** is equal to or greater in size than a 25-year or 100 year (as applicable), 24-hour rainfall event. Catastrophic events include tornadoes, hurricanes, or other catastrophic conditions that would cause an overflow from the large CAFO waste storage structure that is designed, constructed, operated, and maintained to meet all the requirements of this permit.

**Certified CNMP Provider** is a person that attains and maintains certification requirements through a program approved by the United States Department of Agriculture Natural Resources Conservation Service (NRCS).

**Chronic precipitation event** is a series of wet weather conditions, including snowmelt, that precludes reducing the volume of large CAFO waste storage structures and that cause an overflow from the large CAFO waste storage structure that is designed, constructed, operated, and maintained to meet all the requirements of this permit.

**CNMP** means Comprehensive Nutrient Management Plan and is the plan developed by the permittee to implement the requirements of the NMP.

**Department** means the Michigan Department of Environmental Quality.

**Discharge** as used in this permit means the addition of any waste, waste effluent, wastewater, pollutant, or any combination thereof to any surface water of the state.

**Incorporation** means a mechanical operation that physically mixes the surface applied large CAFO waste into the soil so that a significant amount of the surface applied large CAFO waste is not present on the land surface within one hour after mixing. Incorporation also means the soaking into the soil of "liquids being used for irrigation water" such that liquids and significant solid residues do not remain on the land surface. "Liquids being used for irrigation water" are contaminated runoff, milk house waste, or liquids from large CAFO waste treated to separate liquids and solids. "Liquids being used for irrigation water" does not include untreated liquid manures.

**Land application** means spraying or spreading of biosolids, large CAFO waste, wastewater and/or derivatives onto the land surface, injecting below the land surface, or incorporating into the soil so that the biosolids, large CAFO waste, wastewater and/or derivatives can either condition the soil or fertilize crops or vegetation grown in the soil.

**Land application area** means land under the control of an AFO owner or operator, whether it is owned, rented, leased, or subject to an access agreement to which large CAFO waste is or may be applied. Land application area includes land not owned by the AFO owner or operator but where the AFO owner or operator has control of the land application of large CAFO waste.

**Large CAFO waste** means CAFO process wastewater, manure, production area waste or any combination thereof.

## PART II

### Section A. Definitions

**Large concentrated animal feeding operation or large CAFO** is an AFO that stables or confines as many as or more than the numbers of animals specified in any of the following categories:

1. 700 mature dairy cattle (whether milked or dry cows).
2. 1000 veal calves.
3. 1,000 cattle other than mature dairy cows or veal calves. Cattle includes heifers, steers, bulls, and cow/calf pairs.
4. 2,500 swine each weighing 55 pounds or more.
5. 10,000 swine each weighing less than 55 pounds.
6. 500 horses.
7. 10,000 sheep or lambs.
8. 55,000 turkeys.
9. 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system.
10. 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system.
11. 82,000 laying hens, if the AFO uses other than a liquid manure handling system.

As used in this permit the term "large CAFO" includes any animal feeding operation that requests coverage under the permit for which the Department determines that this permit is appropriate for the applicant's operation. A large CAFO includes both production areas and land application areas.

**Manure** means animal excrement and is defined to include bedding, compost and raw materials or other materials commingled with animal excrement or set aside for disposal.

**New Large CAFO** means a large CAFO that is newly built and was not in production (i.e., animals were not on site) prior to February 27, 2004. New Large CAFO also means existing facilities where, due to expansion in production, the process or production equipment is totally replaced or new processes are added that are substantially independent of an existing source at the same site, after February 27, 2004. This does not include replacement due to acts of God or upgrades in technology that serve the existing production.

**NMP** means Nutrient Management Plan and is the requirements in the permit that set forth conditions to assure that water quality standards are met.

**NRCS** means the Natural Resources Conservation Service of the United States Department of Agriculture.

**Overflow** means the discharge of large CAFO waste resulting from the filling of large CAFO waste storage structures beyond the point at which no more large CAFO waste, or storm water can be contained by the structure.

**Production area** is the portion of the large CAFO that includes all areas used for animal product production activities. This includes, but is not limited to: the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milk rooms, milking centers, cow yards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes feed silos, silage bunkers, and bedding materials. The waste containment area includes settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of "production area" is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities. Production area does not include pasture lands (Pasture land is land that is primarily used for the production of forage upon which livestock graze. Pasture land is characterized by a predominance of vegetation consisting of desirable forage species. Sites such as loafing areas, confinement areas, or feedlots which have livestock densities that preclude a predominance of desirable forage species are not considered pasture land.). Production areas do not include land application areas.

**Production area waste** means manure and any waste from the production area and any precipitation (e.g., rain or snow) which comes into contact with, or is contaminated by, manure or any of the components listed in the definition for "production area". Production area waste does not include clean water that is diverted nor does it include water from land application areas.

## PART II

### Section A. Definitions

**Realistic crop yield goals** means crop yield goals established based on soil productivity potential and the crop management practices utilized. A realistic crop yield goal is one which is achievable in three out of five crop years. If the goal is not achieved in at least three out of five years, then the goal shall be re-evaluated and revised.

**Regional Administrator** is the Region 5 Administrator, U.S. EPA, located at R-19J, 77 W. Jackson Blvd., Chicago, Illinois 60604.

**Silage leachate** means a liquid, containing organic constituents, that results from the storage of harvested plant materials, which usually have a high water content.

**Solid stackable manure** means manure and manure mixed with bedding that can be piled up or stacked and will maintain a piled condition. It will also have the characteristic that it can be shoveled with a pitchfork.

**Waste storage structure** means both pond-type storage structures and fabricated storage structures.

**Tile** means a conduit, such as corrugated plastic tubing, tile, or pipe, installed beneath the ground surface to collect and/or convey drainage water.

**Vegetated buffer** means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.

**Water Quality Standards** means the Part 4 Water Quality Standards developed under Part 31 of Act No. 451 of the Public Acts of 1994, as amended, being Rules 323.1041 through 323.1117 of the Michigan Administrative Code.

**25-year, 24-hour rainfall event** or **100-year, 24-hour rainfall event** means the maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years or 100 years, respectively, as defined by the "Rainfall Frequency Atlas of the Midwest", Huff and Angel, Illinois State Water Survey, Champaign, Bulletin 71, 1992, and subsequent amendments, or equivalent regional or state rainfall probability information developed there from.

## PART II

### Section B. Reporting Requirements

#### 1. Retained Self-Monitoring Requirements

The permittee shall maintain with the CNMP a year-to-date log of inspection, monitoring and record keeping results required by this permit and, upon request, provide such log for inspection to the staff of the Department. Such inspection, monitoring and record keeping results shall be submitted to the Department upon request.

The permittee shall certify, in writing, to the Department, on or before April 1<sup>st</sup> of each year, that: 1) all retained self-monitoring requirements have been complied with and a year-to-date log has been maintained; and 2) the application on which this permit is based still accurately describes the animal feeding operation.

#### 2. Discharge and Noncompliance Reporting

Compliance with all applicable requirements set forth in the Federal Act, Parts 31 and 41 of the Michigan Act, and related regulations and rules is required. All instances of discharge or noncompliance shall be reported as follows:

- a. 6-hour reporting – Any discharge shall be reported, verbally, as soon as practicable but no later than 6 hours from the time the permittee becomes aware of the discharge. A written report shall also be provided within five (5) days.
- b. other reporting – The permittee shall report, in writing, all other instances of noncompliance not described in a. above at the time monitoring reports are submitted; or, in the case of retained self-monitoring or inspection results or records, within five (5) days from the time the permittee becomes aware of the noncompliance.

Written reporting shall include: 1) a description of the discharge and/or cause of noncompliance and steps taken to correct the noncompliance; and 2) the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and the steps taken to reduce, eliminate and prevent recurrence of the noncomplying discharge. All reporting shall be to all of the following: the Department, the clerk of the local unit of government and the county health department. Verbal reporting to the Department after regular working hours shall be made by calling the Department's 24-hour Pollution Emergency Alerting System telephone number, 1-800-292-4706 (calls from out-of-state dial 1-517-373-7660). Verbal reporting to the clerk of the local unit of government and the county health department after regular working hours shall be made as soon as those agencies are next open for business unless those agencies provide after hours contact information.

#### 3. Spill Reporting

The permittee shall immediately report any release of any polluting material which occurs to the surface waters or groundwaters of the state, unless the permittee has determined that the release is not in excess of the threshold reporting quantities specified in the Part 5 Rules (Rules 324.2001 through 324.2009 of the Michigan Administrative Code), by calling the Department at the number indicated on the first page of this permit, or if the notice is provided after regular working hours call the Department's 24-hour Pollution Emergency Alerting System telephone number, 1-800-292-4706 (calls from out-of-state dial 1-517-373-7660).

Within ten (10) days of the release, the permittee shall submit to the Department a full written explanation as to the cause of the release, the discovery of the release, response (clean-up and/or recovery) measures taken, and preventative measures taken or a schedule for completion of measures to be taken to prevent reoccurrence of similar releases.

#### 4. Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or any other activity which may result in noncompliance with permit requirements.

## PART II

### Section B. Reporting Requirements

#### 5. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities for which this authorization applies, the permittee shall submit to the Department 30 days prior to the actual transfer of ownership or control a written agreement between the current permittee and the new permittee containing: 1) the legal name and address of the new owner; 2) a specific date for the effective transfer of permit responsibility, coverage and liability; and 3) a certification of the continuity of or any changes in operations, wastewater discharge, or wastewater treatment.

If the new permittee is proposing changes in operations, wastewater discharge, or wastewater treatment, the Department may propose modification of this permit in accordance with applicable laws and rules.

#### 6. Records Retention

All records, reports, documents, logs and information resulting from the requirements of this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of five (5) years, or longer if requested by the Department.

#### 7. Notification of Changes in Discharge

The permittee shall notify the Department, in writing, within 10 days of knowing, or having reason to believe, that any activity or change has occurred or will occur which would result in the discharge of: 1) detectable levels of chemicals on the current Michigan Critical Materials Register, priority pollutants or hazardous substances set forth in 40 CFR 122.21, Appendix D, or the Pollutants of Initial Focus in the Great Lakes Water Quality Initiative specified in 40 CFR 132.6, Table 6, which were not acknowledged in the application or listed in the application at less than detectable levels; 2) detectable levels of any other chemical not listed in the application or listed at less than detection, for which the application specifically requested information; or 3) any chemical at levels greater than five times the average level reported in the complete application (see the first page of this permit for the date(s) the complete application was submitted). Any other monitoring results obtained as a requirement of this permit shall be reported in accordance with the compliance schedules.

#### 8. Changes in Facility Operations

Any anticipated action or activity, including but not limited to facility expansion, production increases, or process modification, which will result in new or increased loadings of pollutants to the receiving waters must be reported to the Department by a) submission of an increased use request (application) and all information required under Rule 323.1098 (Antidegradation) of the Water Quality Standards or b) by notice if the following conditions are met: 1) the action or activity will not result in a change in the types of wastewater discharged or result in a greater quantity of wastewater than currently authorized by this permit; 2) the action or activity will not result in violations of the effluent limitations specified in this permit; 3) the action or activity is not prohibited by the requirements of Part II.B.9.; 4) the action or activity will not require notification pursuant to Part II.B.7. Following such notice, the permit may be modified according to applicable laws and rules to specify and limit any pollutant not previously limited.

#### 9. Bioaccumulative Chemicals of Concern (BCC)

Consistent with the requirements of Rules 323.1098 and 323.1215 of the Michigan Administrative Code, the permittee is prohibited from undertaking any action that would result in a lowering of water quality from an increased loading of a BCC unless an increased use request and antidegradation demonstration have been submitted and approved by the Department.

## PART II

### Section B. Reporting Requirements

#### 10. Availability of Reports

Except for data determined to be confidential under Section 308 of the Federal Act and Rule 2128 (Rule 323.2128 of the Michigan Administrative Code), all reports submitted in accordance with the terms of this permit shall be available for public inspection at the offices of the Department and the Regional Administrator. As required by the Federal Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Act and Sections 3112, 3115, 4106 and 4110 of the Michigan Act.

#### 11. Representative Monitoring and Sampling

Monitoring shall be representative of the monitored activity. Samples and measurements taken as required herein shall be representative of both the large CAFO waste that is applied to the land and the soils that receive the large CAFO waste.

#### 12. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report, as appropriate, or kept in accordance with the retained self-monitoring requirements of Part II.B.1. Such increased frequency shall also be indicated.

Monitoring required pursuant to Part 41 of the Michigan Act or Rule 35 of the Mobile Home Park Commission Act (Act 96 of the Public Acts of 1987) for assurance of proper facility operation shall be submitted as required by the Department.

#### 13. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations promulgated pursuant to Section 304(h) of the Federal Act (40 CFR Part 136 - Guidelines Establishing Test Procedures for the Analysis of Pollutants), unless specified otherwise in this permit. Requests to use test procedures not promulgated under 40 CFR Part 136 for pollutant monitoring required by this permit shall be made in accordance with the Alternate Test Procedures regulations specified in 40 CFR 136.4. These requests shall be submitted to the Chief of the Permits Section, Water Bureau, Michigan Department of Environmental Quality, P.O. Box 30273, Lansing, Michigan, 48909-7773. The permittee may use such procedures upon approval.

The permittee shall periodically calibrate and perform maintenance procedures on all analytical instrumentation at intervals to ensure accuracy of measurements. The calibration and maintenance shall be performed as part of the permittee's laboratory Quality Control/Quality Assurance program.

#### 14. Compliance Dates Notification

Within 14 days of every compliance date specified in this permit, the permittee shall submit a written notification to the Department indicating whether or not the particular requirement was accomplished. If the requirement was not accomplished, the notification shall include an explanation of the failure to accomplish the requirement, actions taken or planned by the permittee to correct the situation, and an estimate of when the requirement will be accomplished. If a written report is required to be submitted by a specified date and the permittee accomplishes this, a separate written notification is not required.

**PART II****Section C. Management Responsibilities****1. Duty to Comply**

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

It is the duty of the permittee to comply with all the terms and conditions of this permit. Any noncompliance with the Effluent Limitations, Special Conditions, or terms of this permit constitutes a violation of the Michigan Act and/or the Federal Act and constitutes grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of an application for permit renewal.

**2. Operator Certification**

The permittee shall have the waste treatment facilities under direct supervision of an operator certified at the appropriate level for the facility certification by the Department, as required by Sections 3110 and 4104 of the Michigan Act. The permittee shall provide the Department, in writing, the contact information for the certified operator(s).

**3. Facilities Operation**

The permittee shall, at all times, properly operate and maintain all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures.

**4. Adverse Impact**

The permittee shall take all reasonable steps to minimize any adverse impact to the surface waters or groundwaters of the state resulting from noncompliance with any requirement specified in this permit.

**5. Containment Facilities**

The permittee shall provide facilities for containment of any accidental losses of polluting materials in accordance with the requirements of the Part 5 Rules (Rules 324.2001 through 324.2009 of the Michigan Administrative Code).

**6. Right of Entry**

The permittee shall allow the Department, any agent appointed by the Department or the Regional Administrator, upon the presentation of credentials and following appropriate biosecurity protocols:

- a. a. to enter upon the permittee's premises where an effluent source is located, production areas, land application areas or any place in which any records are required to be kept under the terms and conditions of this permit.
- b. b. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect process facilities, treatment works, monitoring methods and equipment regulated or required under this permit; and to sample any discharge of pollutants.

**7. Signatory Requirement**

All applications, reports, or information submitted to the Department shall be signed and certified as specified in Rule 2114 (Rule 323.2114 of the Michigan Administrative Code).

**8. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**PART II****Section D. Activities Not Authorized by This Permit****1. Discharge to the Groundwaters**

This permit does not authorize any discharge to the groundwaters. Such discharge may be authorized by a groundwater discharge permit issued pursuant to the Michigan Act.

**2. Civil and Criminal Liability**

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond the permittee's control, such as accidents, equipment breakdowns, or labor disputes.

**3. Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee may be subject under Section 311 of the Federal Act except as are exempted by federal regulations.

**4. State Laws**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Federal Act.

**5. Property Rights**

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits or approvals as may be required by law.

**PART III****Technical Standard for the Surface Application of  
Concentrated Animal Feeding Operations Waste on Frozen or Snow-Covered Ground Without  
Incorporation or Injection**

When Concentrated Animal Feeding Operation (CAFO) waste is surface-applied to frozen or snow-covered ground, without incorporation or injection, and that application is followed by rainfall or temperatures rising above freezing, the CAFO waste can run off into lakes, streams, or drains. Documented evidence shows that this runoff can cause resource damage to the surface waters of the state. Therefore, in accordance with Title 40 of the Code of Federal Regulations, Section 123.36, Establishment of Technical Standards for Concentrated Animal Feeding Operations, and State Rule 323.2196(5), CAFO Permits, the Michigan Department of Environmental Quality, Water Bureau, establishes the following Technical Standard. This Technical Standard shall be used for field-by-field assessments, as required by National Pollutant Discharge Elimination System permits issued to CAFOs, to assure that the land application of CAFO waste to frozen or snow-covered ground, without incorporation or injection, will not result in CAFO waste entering the waters of the state.

Based on the frozen and/or snow-covered conditions, the minimal settling and breaking down of the waste during these conditions, and the inability to predict or control snowmelt and rainfall, there are no practices that can ensure the runoff from fields with surface-applied waste on frozen or snow-covered ground will not be polluted. This standard assumes that surface runoff from snowmelt and/or rainfall will occur, and that the runoff will be polluted if CAFO waste is surface-applied on frozen or snow-covered ground. Therefore, the way to prevent these discharges is to apply CAFO waste only to fields, or portions of fields, where the runoff will not reach surface waters.

A field-by-field assessment must be completed, and all of the following requirements must be met and documented:

1. The Natural Resources Conservation Service's Manure Application Risk Index (MARI)\* has been completed to identify fields, or portions of fields, that scored 37 or lower on the MARI.
2. An on-site field inspection of the entire field, or portion of field, that scored 37 or lower under the MARI has been completed. The inspection will take into consideration the slope and location of surface waters, tile line risers, and other conduits to surface water.
3. Based on the on-site field inspection, the Comprehensive Nutrient Management Plan (CNMP) will include documentation on topographic maps, the fields or portions of fields where the runoff will not flow to surface waters, and designate those areas as the only areas authorized for surface application without incorporation to frozen or snow-covered ground.
4. The findings of the inspection and documentation in the CNMP will be approved by a certified CNMP provider.

This assessment must be incorporated into the CNMP, and submitted as part of the CNMP Executive Summary each year.

\* Grigar, J., and Lemunyon, J. A Procedure for Determining the Land Available for Winter Spreading of Manure in Michigan. NRCS publication. (Available on the MDEQ NPDES website)

ORIGINAL SIGNED

Richard A. Powers, Chief  
Water Bureau

April 19, 2005

Date